

WHAT IS CLAIMED IS:

1. Seed of a soybean variety designated 0491735 wherein a sample of seed was deposited under ATCC Accession No. \_\_\_\_\_.
2. A soybean plant, or parts thereof, of variety 0491735, seed of said variety having been deposited under ATCC Accession No. \_\_\_\_\_.
3. Pollen of the plant of claim 2.
4. An ovule of the plant of claim 2.
5. A tissue culture of regenerable cells from the plant of claim 2.
6. A tissue culture according to claim 5, wherein said cell or a protoplast of the tissue culture is derived from a tissue selected from the group consisting of: leaves, pollen, embryos, cotyledon, hypocotyl, meristematic cells, roots, root tips, anthers, flowers, seeds, stems and pods.
7. A soybean plant regenerated from the tissue culture of claim 5, wherein the regenerated plant is capable of expressing all of the morphological and physiological characteristics of soybean cultivar 0491735 and wherein a sample of seed was deposited under ATCC Accession No. \_\_\_\_\_.
8. A method for producing a hybrid soybean seed comprising crossing a first parent soybean plant with a second parent soybean plant and harvesting the resultant hybrid soybean seed, wherein said first parent soybean plant or said second parent soybean plant is the soybean plant of claim 2.
9. A hybrid soybean seed produced by the method of claim 8.
10. A hybrid soybean plant, or parts thereof, produced by growing said hybrid soybean seed of claim 9.
11. A method of producing a soybean seed by growing said hybrid soybean plant of claim 10 and harvesting the resultant seed.

12. A method for producing a soybean variety 0491735-derived soybean plant, comprising:
  - a) crossing soybean variety 0491735 wherein a sample of seed was deposited under ATCC accession number \_\_\_\_\_, with a second soybean plant to yield progeny soybean seed; and
  - b) growing said progeny soybean seed, under plant growth conditions, to yield said soybean variety 0491735-derived soybean plant.
13. A soybean plant, or parts thereof, produced by the method of claim 12.
14. A method for producing a soybean variety 0491735-derived soybean plant, comprising:
  - a) crossing soybean variety 0491735 wherein a sample of seed was deposited under ATCC accession number \_\_\_\_\_, with a second soybean plant to yield progeny soybean seed;
  - b) growing said progeny soybean seed, under plant growth conditions, to yield said soybean variety 0491735-derived soybean plant;
  - c) crossing said soybean variety 0491735-derived soybean plant with itself to yield additional soybean variety 0491735-derived progeny soybean seed;
  - d) growing said progeny soybean seed of step (c) under plant growth conditions, to yield additional soybean variety 0491735-derived soybean plants; and
  - e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate further soybean variety 0491735-derived soybean plants.
15. A soybean plant, or parts thereof, produced by the method of claim 14.

16. A method for producing a soybean variety 0491735-derived soybean plant, comprising:
  - a) crossing soybean variety 0491735 wherein a sample of seed was deposited under ATCC accession number \_\_\_\_\_, with a second soybean plant to yield progeny soybean seed;
  - b) growing said progeny soybean seed, under plant growth conditions, to yield said soybean variety 0491735-derived soybean plant;
  - c) crossing said soybean variety 0491735-derived soybean plant with another soybean plant to yield additional soybean variety 0491735-derived progeny soybean seed;
  - d) growing said progeny soybean seed of step (c) under plant growth conditions, to yield additional soybean variety 0491735-derived soybean plants; and
  - e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate further soybean variety 0491735-derived soybean plants.
17. A soybean plant, or parts thereof, produced by the method of claim 16.
18. The soybean plant, or parts thereof, of claim 2, wherein the plant or parts thereof have been transformed so that its genetic material contains a transgene operably linked to a regulatory element and wherein said transgene is selected from the group consisting of: herbicide resistance, insect resistance and disease resistance.
19. A soybean plant according to claim 18, wherein said herbicide resistance is to glyphosate, glufosinate; a sulfonylurea or imidazolinone herbicide, or a protoporphyrinogen oxidase inhibitor.
20. A method for producing a soybean plant that contains in its genetic material a transgene, comprising crossing the soybean plant of claim 2 with a soybean plant containing a transgene, so that the genetic material of the progeny that result from the cross contains a transgene operably linked to a regulatory element.
21. The method of claim 20, wherein said transgene is selected from the group consisting of: herbicide resistance, insect resistance and disease resistance.

22. Soybean plants, or parts thereof, produced by the method of claim 20.